

REMARKS/ARGUMENTS

In response to the Office Action mailed March 12, 2007, Applicant amends his application and requests reconsideration. In this Amendment no claims are cancelled and claims 6-9 are added so that claims 1-4 and 6-9 are now pending.

As previously described, the claims pending encompass the embodiment of Figure 6 of the patent application. The amendments made here are fully supported by that figure. The amended claims describe the third splitter as branching the first arm only to the first and second ports. In the embodiment of Figure 6, the first splitter corresponds to element 13, a three terminal splitter, one terminal being connected to the first arm 31 and the other terminals being respectively connected to the first and third ports. The connection to the first port passes through the first splitter 11. The arrangement with respect to the fourth splitter is further described as branching the first arm only to the second and fourth ports. In the embodiment of Figure 6, that fourth splitter corresponds to element 14, a three terminal splitter. One terminal is connected to the first arm, another terminal is directly connected to fourth port, and the third terminal is connected to the second port through the second splitter. These arrangements not only provide support for amended claims 1 and 3 but also for the added claims 6-9.

The foregoing amendments and added claims make clear that of the splitters mentioned in the claims, at least the third and fourth splitters are three terminal devices. The language of the claim excludes use of splitters having more than three terminals.

Claims 1-4 were rejected as anticipated by Leuthold et al. (U.S. Patent 5,933,554, hereinafter Leuthold). This rejection is respectfully traversed as to all claims now pending.

The application of Leuthold and its Figure 21 to the claims, while complex, is understood. In making that application, the Examiner identified as corresponding to splitters of the claims the elements 421, 422, 425, and 426 of Figure 21 of Leuthold.

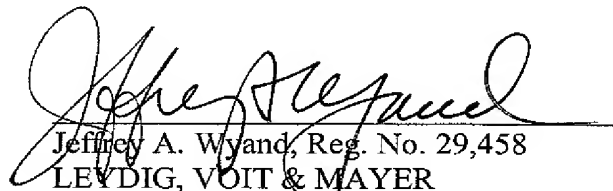
The splitters 421 and 422 are both four terminal devices and the splitters 425 and 426 are six terminal devices. Thus, none of those splitters of Leuthold are within the scope of the claims presented here as to the third and fourth splitters. Leuthold's Figure 21 cannot anticipate any pending claim.

The difference in the number of terminals of the splitters employed in the invention as compared to Leuthold has significant consequences. By using splitters with fewer terminals the optical functional device according to the invention can be smaller and substantially less complicated than the Leuthold structure. Further, manufacturing of the optical functional devices is simpler with the invention than in Leuthold.

Moreover, Leuthold is directed to multimode interference couplers. This focus of Leuthold is apparent from the title as well as from the first paragraph Leuthold's specification, describing the technical field of the invention. The invention is not directed to these extraordinarily complex couplers and, in fact, uses a simpler couplers, as described in the patent application with respect to Figures 13A-18B and claims withdrawn for examination. See the patent application from page 15, line 17 through page 19, line 4. Because of this additional difference, Leuthold cannot anticipate nor suggest any claim now pending.

Reconsideration and allowance of all pending claims are earnestly solicited.

Respectfully submitted,



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JAW:yes